

## SECTION 145

### LUMBER

#### 145.1 GENERAL

This section specifies the types and grading of lumber that will be acceptable for certain uses.

#### 145.2 REFERENCES

145.2.1 United States Product Standard PS 1-66 for Softwood Plywood

145.2.2 Standard Specifications for Grades of California Redwood of the Redwood Inspection Service

145.2.3 Western Wood Products Association

#### 145.3 LUMBER, PLYWOOD, AND REDWOOD

##### 145.3.1 LUMBER AND PLYWOOD:

145.3.1.1 Unless otherwise specified or shown on the drawings, all lumber shall be Douglas fir or pine and shall be selected as to grade and shall conform in all particulars to the Standard Grading and Dressing Rules of the Western Wood Products Association or other grading agency approved by the ENGINEER.

145.3.1.2 Plywood shall conform to the performance standards for its type in United States Product Standard PS 1-66 for Softwood Plywood, Construction and Industrial.

145.3.1.3 Lumber or plywood for the uses listed in Table 145.3.1.3 shall not be lower than the grades shown.

##### 145.3.2 REDWOOD:

145.3.2.1 Redwood lumber shall be selected as to grade and shall conform in all particulars to the Standard Specifications for Grades of California Redwood of the Redwood Inspection Service.

145.3.2.2 Redwood lumber for the uses listed in Table 145.3.2.2 shall not be lower than the grades shown.

#### 145.4 GRADE MARKING

145.4.1 Each piece of lumber shall bear an official grade mark which, unless authorized otherwise, shall be the grade mark adopted by one of the following:

145.4.1.1 For Douglas fir and pine, marking shall be the Western Wood Products Association or other grading agency approved by the ENGINEER.

145.4.1.2 For redwood, marking shall be the Redwood Inspection Service.

145.4.1.3 For plywood, each sheet of plywood shall bear the official stamp of a quality control agency stating the grade of the sheet.

#### 145.5 MEASUREMENT AND PAYMENT

145.5.1 Lumber, plywood, or redwood where required may be considered a subsidiary item. In which case no measurement or payment will be made.

145.5.2 If any one of these materials are considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal.

TABLE 145.3.1.3  
LUMBER AND PLYWOOD--USES AND GRADES

<u>USES</u>	<u>GRADES</u>
A. Permanent construction, such as bridges and culverts.	Select structural for beams and stringers; construction grade for balance of structure.
B. Minor permanent construction, such as fences, guard rails and posts, pavement headers, bulkheads, retaining structures, etc.	Construction grade.
C. Falsework and studs, and wales for formwork.	Construction grade framing, beams, or timbers.
D. Form sheeting for non-showing surfaces of ornamental concrete.	Standard grade boards; shiplap; or any grade of plywood.
E. Form sheeting for showing surface of ornamental concrete.	Vertical grain "C" industrial clear; concrete form grade of plywood; or overlay plywood.
F. Form sheeting for curved soffits of bridge and tunnel arches, plastered, or unplastered.	Select merchantable boards concrete grade of plywood; or overlay plywood.
G. Soffits of beams and girders and slabs between beams and girders; for beam and girder sides, except ornamental concrete; and for head-walls or end-walls of culverts or covered conduits.	Concrete form grade of plywood or overlay plywood.
H. Form sheeting for showing surfaces of channel walls or interior surfaces except floors, of covered conduit, and all other showing surfaces not specified above.	Tongue and groove flooring equal to Grade "C" and better flat grain; concrete form grade of plywood; or overlay plywood.
I. All other lumber.	Construction grade.

TABLE 145.3.2.2  
REDWOOD USES AND GRADES

<u>USES</u>	<u>GRADES</u>
A. Bridges, culverts, and guardrail posts.	Select all heart structural timber.
B. All other redwood lumber.	Foundation.